

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A drug delivery device for animals, the device comprising:

- a. ~~at least two syringes~~ at least a first syringe and a second syringe;
- b. a plurality of disposable tubes;
- c. at least one catheter placed into an animal and connected to each of the first and second ~~at least two~~ syringes by the plurality of disposable tubes;
- d. at least one pinch valve, each pinch valve having a first position and a second position, wherein the second position receives one of the plurality of disposable tubes therethrough at a position located between the at least one catheter and one of the first or second ~~at least two~~ syringes connected by the at least one disposable tube for control of fluid therebetween without being in fluid communication with the fluid; ~~[[and]]~~
- e. at least a first and second fluid reservoir, wherein ~~each of the~~ first fluid reservoirs contains a first fluid and wherein the first fluid reservoir is ~~connected~~ attached to the first syringe ~~one of the at least two syringes~~ by one of the plurality of disposable tubes and wherein the second fluid reservoir contains a drug fluid and is connected ~~attached~~ to the second syringe ~~another of the at least two syringes~~ by one of the plurality of disposable tubes ~~[[.]]; and~~
- f. a controller that is operably connected to the first and second syringes and operably connected to the at least one pinch valve, wherein the controller is capable of operating the first and second syringes and the at least one pinch valve to prime the at least one

catheter, to flush the plurality of disposable tubes and/or the at least one catheter, and to deliver the first fluid or drug to the animal.

2. (Currently Amended) The drug delivery device of claim 1, further comprising ~~at least two a first and second~~ syringe pumps, wherein ~~the first~~ each of the at least two syringe pumps is associated with ~~one of the at least two first syringes and the second syringe pump is associated with the second syringe,~~ such that ~~each of the first and second~~ at least two syringe pumps operates each of the ~~at least two first and second~~ syringes independently of each other.

3. (Canceled).

4. (Currently Amended) The drug delivery device of claim 1, ~~wherein the at least two syringes comprise a first syringe, a second syringe and~~ further comprising a third syringe.

5. (Currently Amended) The drug delivery device of claim 4, ~~wherein the at least two syringe pumps comprise a first syringe pump operably connected to first syringe, a second syringe pump operably connected to the second syringe and~~ further comprising a third syringe pump operably connected to the third syringe.

6. (Previously Presented) The drug delivery device of claim 5, further comprising a third fluid reservoir.

7. (Previously Presented) The drug delivery device of claim 6, wherein the plurality of disposable tubes comprises a first syringe inlet connecting the first fluid reservoir to the first syringe, a second syringe inlet connecting the second fluid reservoir to the second syringe, a third syringe inlet connecting the third reservoir to the third syringe, a first syringe outlet

connected to the first syringe, a second syringe outlet connected to the second syringe, a third syringe outlet connected to the third syringe, a connecting tube that connects the first and second syringe outlets to the third syringe outlet and a system outlet that connects the connecting tube and third syringe outlet to the at least one catheter.

8. (Original) The drug delivery device of claim 7, wherein the at least one catheter comprises a catheter connected to the system outlet by a catheter outlet.

9. (Previously Presented) The drug delivery device of claim 8, wherein the at least one pinch valve comprises a first pinch valve with its first position containing the first syringe inlet and its second position containing the first syringe outlet, a second pinch valve with its first position containing the second syringe inlet and its second position containing the second syringe outlet, a third pinch valve with its first position containing the third syringe inlet and its second position containing the third syringe outlet, and a fourth pinch valve with its first position containing the catheter outlet.

10. (Previously Presented) The drug delivery device of claim 9, further comprising a waste outlet that is connected to the system outlet and that is contained by the second position of the fourth pinch valve, so that when the first position of the fourth pinch valve is open, the second position of the fourth pinch valve is closed and fluid is allowed to pass between the system outlet and the catheter outlet, and when the second position of the fourth pinch valve is open, the first position of the fourth valve is closed and fluid is allowed to pass between the system outlet and the waste outlet.

11. (Currently Amended) The drug delivery device of claim 10, ~~further comprising a~~ wherein ~~the controller that~~ is operably connected to the first, second, and third syringe pumps and ~~that~~ is operably connected to the first, second, third, and fourth pinch valves, such that the controller automatically controls the movement of the first, second, and third syringe pumps and controls the movement of the first and second positions of each of the first, second, third, and fourth pinch valves.

12.-15. (Canceled).

16. (Previously Presented) The drug delivery device of claim 5, wherein the first fluid reservoir contains a drug.

17. (Currently Amended) The drug delivery device of claim 5, wherein the ~~second~~ first fluid reservoir contains a saline solution.

18.-42. (Canceled).

43. (Currently Amended) A drug delivery device for animals comprising a housing that holds:

- a. at least a first, second and third tube connector;
- b. at least a first and second syringe inlet tube, each with a first end and a second end, wherein the second end of the first syringe inlet tube is connected to the first tube connector and the second end of the second syringe inlet tube is connected to the second tube connector;
- c. at least a first and second syringe, the first and second syringes being connected to the first and second tube connector, respectively;

d. at least a first and second syringe outlet tube, each with a first end and a second end, wherein the first end of the first syringe outlet tube is connected to the first tube connector and the second end of the first syringe outlet tube is connected to the third tube connector and wherein the first end of the second syringe outlet tube is connected to the second tube connector and the second end of the second syringe outlet tube is connected to the third tube connector;

[[d]] e. at least a first and second fluid reservoir wherein the first fluid reservoir is connected to the first end of the first syringe inlet tube and the second ~~first~~ fluid reservoir is connected to the first end of the second syringe inlet tube;

[[e]] f. at least one catheter placed into an animal;

[[f]] g. a system outlet tube with a first end and a second end, wherein the first end of the system outlet tube is connected to the catheter and the second end of the outlet tube is connected to the third tube connector; [[and]]

[[g]] h. at least a first and second pinch valve, the first pinch valve having a first ~~position~~portion through which the first syringe inlet tube passes and a second position through which the first syringe outlet tube passes and the second pinch valve having a first position through which the second syringe inlet tube passes and a second position through which the second syringe outlet tube passes, wherein in each of the first and second pinch valves only one of the first or second position opens while the other position remains closed, without being in communication with the fluid, in order to control fluid passing

through the syringe inlet tubes, the syringe outlet tubes, the system outlet tube and the catheter [[.]]; and

i. electronic circuitry that controls the opening and closing of the first and second positions of each of the first and second valves, such that the electronic circuitry operates to prime the at least one catheter, flush the system outlet tube and/or the at least one catheter and deliver fluid to the animal.

44. (Previously Presented) The drug delivery device of claim 43 wherein the first and second syringe inlet tubes, the first and second syringe outlet tubes, and the system outlet tubes are all disposable tubes.

45. (Canceled).

46. (Previously Presented) The drug delivery device of claim 43 further comprising a fourth tube connector connected to the first end of the system outlet, a waste tube with a first end and a second end, wherein the first end is connected to the fourth tube connector, and a catheter inlet tube with a first end connected to the fourth tube connector and the second end connected to the catheter.

47. (Previously Presented) The drug delivery device of claim 46 further comprising a third pinch valve with a first position through which the catheter inlet tube passes and a second position through which the waste tube passes, wherein only one of the first or second position opens while the other position remains closed in order to allow fluid to either pass through the waste tube or catheter inlet tube.